

STATE OF NORTH CAROLINA

Approved Classification: _____

OFFICE OF STATE PERSONNEL

Effective Date: _____

Analyst: _____

POSITION DESCRIPTION FORM (PD-102R-92)

(This Space for Personnel Dept. Use Only)

1. Present Classification Title of Position Transportation Engineer II	7. Pres. 15 Digit Position No. 425003050203340	Prop. 15 Digit Pos. No.
2. Usual Working Title of Position Property Survey Engineer	8. Department, University, Commission, or Agency Department of Transportation	
3. Requested Classification of Position Transportation Engineer II	9. Institution & Division Division of Highways	
4. Name of Immediate Supervisor	10. Section and Unit Location & Surveys Unit	
5. Supervisor's Position Title & Position Number TES II - Central Office	11. Street Address, City and County 1020 Birch Ridge Dr. Raleigh N.C.	
6. Name of Employee	12. Location of Workplace, Bldg. And Room No. Century Center Bldg. B Room 199	

I. A. Primary Purpose of Organizational Unit:

The primary purpose of Location & Surveys is to serve as support services in providing engineering analysis, mapping and other data for the design of transportation facilities and the acquisition of property for the construction of transportation facilities.

B. Primary Purpose of Position:

Position is supervisory, administrative and advanced professional work in directing a moderately sized engineering oriented section in plan preparation, review and compilation of condemnation surveys, preparation of exhibits to be used in court by the Attorney General's office, computation of property ties for plan sheets on all TIP projects, geometrics, coordinating and scheduling, and the evaluation review and use of survey data. Position provides engineering input on all condemnation surveys. The position serves as a liaison between the Location and Surveys Property Section and other units such as the Attorney General's Office, Roadway Design, and the Right of Way Branch.

C. Work Schedule:

Normal work hours are 7:30 AM to 4:30 PM, Monday through Friday, with 1 hour for lunch. Flex time or seasonably variable work hours may be used in individual offices based upon needs and circumstances.

D. Change in Responsibilities or Organizational Relationship:

Duties of position have not changed. This is a definition of present duties as they exist.

II. A. DESCRIPTION OF RESPONSIBILITIES AND DUTIES: Method Used (Check One) Order of importance
Sequential order X

Place an asterisk (*) next to each essential function. (See instructions for complete explanation.) Please note percentage of time for each function.

No. %

- 1 45 **Engineering Input** - Position provides engineering input into the preparation of all condemnation surveys and mapping provided through NCDOT. This person coordinates engineering revisions on condemnations with roadway engineers from Roadway Design or consultants through Design Services, with representatives of the Right Of Way Branch, or attorneys from the NC Attorney General's Office. This individual serves as expert witness on engineering matters when requested in condemnation hearings for NCDOT. This position serves as advisor to attorneys from the NC Attorney General's Office in the evaluation and preparation of exhibits based upon or relative to engineering or surveying technical matters. This individual works closely with personnel from the Right Of Way Branch, Chief Engineer's Office, and other state agencies coordinating and supervising surveys and preparation of survey maps for state properties and in the preparation of legal documents necessary for the transfer of title and design of capital improvements on state facilities, for waste disposal and borrow pits, for purchase of wetland mitigation sites, etc. as requested by others in NCDOT.
- 2 25 **Supervision** - This position supervises and coordinates activities of technicians in the preparation of final survey maps pertaining to condemnations, advanced acquisitions, residues, state properties, and right of way takings from other government agencies (federal, other NC state agencies, county, and city). This individual supervises, plans, directs, reviews, and evaluates the work of technicians in the preparation of maps and legal descriptions for state properties, mitigation sites, etc., as requested. This position reviews the creation of computer generated design files from engineering survey data transmitted from one of several Unit field offices. This position supervises computations for highway alignments used on condemnation maps, property maps, etc. as listed above. This position has responsibility of final review and approval on all maps, exhibits, etc., going from this group for use by non-technical personnel (attorneys, Right of Way agents).
- 3 20 **Personnel** - The Group Leader will administer the NCDOT personnel policies within the Group. This includes staffing the group, administering performance management, maintaining personnel and time records, and taking the lead in administering discipline with the approval of Unit management.
- 4 5 **Training** - The Group Leader will determine the training needs of those in the group and work toward providing the needed training. This may require the Group Leader to aid in training or identify resources in the Group to train others or request assistance for training.
- 5 5 **Other duties** - as defined by supervisor or Unit management.

II. B. OTHER POSITION CHARACTERISTICS: (con't)

1. Accuracy Required in Work:

Engineering and surveying measurements and calculations necessary to millimeter reporting is required. Time records must be accurate to within 6 minutes to insure correct salaries. Absolute accuracy in documenting personnel actions is mandatory. Accurate records of contract negotiations must be maintained to insure proper procedures are followed and must be available for audit.

2. Consequence of Error:

Inaccurate procedures and/or failure to follow established guidelines and procedures can result in erroneous data being conveyed to others for use in design or property acquisition, requiring resurveys and redesign causing project delays and costs overruns. Poor understanding of legal and/or technical aspects can result in additional costs for litigation or further costs in proper establishments of boundaries. Errors in property data can result in purchase of property from someone other than the owners. Erroneous data or failure to follow proper procedures could result in loss of court cases in which this position is greatly involved.

3. Instructions Provided to Employee:

Position requirements include sufficient experience and knowledge to enable the employee to perform the duties of this position. Goals are defined and procedural guidelines are established. Deadlines are established when applicable. It is usually up to the employee to ensure completion of tasks in a timely and accurate manner, and to determine the best method to resolve issues, provide and present data, or prepare for the assigned task. Instructions may be either oral or written and may be general or specific in nature, according to the type and scope of work.

4. Guides, Regulations, Policies and References Used by Employee:

NCDOT Highway Design Manual; AASHTO Geometric Design Policy; CADD and other computer references and manuals; General Statutes of North Carolina as related to Highways; NCDOT Personnel Manual; NCDOT Field Fiscal Procedural Manual; NCDOT Workplace Safety Manual; NCDOT and FHWA Manuals on Uniform Traffic Control Devices (MUTCD); Legal Principles of Boundary Surveying and other legal texts on surveying; various engineering and surveying texts including cadastral, geodesy, and route location; general practices, procedures, and ethics of professional engineering and surveying as described by the NC State Board of Registration for Professional Engineers and Registered Land Surveyors; dictionary.

5. Supervision Received by Employee:

This employee is under the supervision of the TES II. Very little daily instructions or supervision is provided on 95% of the duties of the position. Technical problems are either resolved at this level or referred to supervisors for involvement and resolution. Tasks and duties may be reviewed during and after completion, but due to the independent operation of this position, specific activities that lead to task accomplishment are not often reviewed. Personnel matters are reviewed with immediate supervisor as needed.

6. Variety and Purpose of Personal Contacts:

Personal contact is with the general public, staff of other units, Divisions, or Branches of NCDOT, representatives of private engineering firms that may be doing work for this Unit, attorneys representing NCDOT or contesting property owners, County Managers or Register of Deed staff working in tax offices, municipal engineering units, and utility representatives.

7. Physical Effort:

Strenuous physical effort is not required. However, stress management is a main concern. Because of the unpredictable nature of the court system, very often exhibits are needed on extremely short notice.

8. Work Environment and Conditions:

Work is primarily limited to office duties located in the central office of the Location and Surveys Unit in the Century Center building "B", Raleigh North Carolina. On occasion visits are made to the Legal department in the Transportation Building and also to the field offices of the Location and Surveys Unit across the state. Employee may be assigned to work with a field survey crew on special projects. Travel to various parts of the state may be required.

9. Machines, Tools, Instruments, Equipment and Materials Used:

A general knowledge of all field engineering surveying instruments such as theodolites, electronic distance measuring devices, and office machinery including calculator, computers, and CADD workstations. Mainframe terminal, PC computers, calculators and CADD workstations are used on a daily basis.

10. Visual Attention, Mental Concentration and Manipulative Skills:

Computer/calculator operation, writing memos, and compiling reports require keypunch and writing abilities. Mental concentration is required to plan and coordinate activities, review data, solve surveying and engineering problems, and work with others in problem solving. Visual as well as mental attention and ability is required in reviewing data and project evaluation.

11. Safety for Others:

Most of the work performed by the employee is independent of other employees. However, practical application of work duties and an overall concern for fellow employees must be executed and ever present in the mind of all employees.

12. Dynamics of Work:

Engineering and design standards are often revised. Methods, procedures, and equipment used for collecting route location and other survey data, including survey equipment and computer hardware and software, are always being revised, upgraded, or improved. These changes require a continuous upgrading and maintenance of knowledge of the engineering and surveying professions.

III. KNOWLEDGES, SKILLS & ABILITIES AND TRAINING & EXPERIENCE REQUIREMENTS:

A. Knowledges, Skills and Abilities:

Thorough knowledge of principles and practices of professional civil engineering as related to Location and Design of highways with particular emphasis on route, geodetic, and cadastral surveying and mapping principles. A complete knowledge and understanding of all General Statutes as they apply to the Department of Transportation. Also, a thorough understanding of the laws of the state, and rules as set forth by the Board of Registration that govern the practice of surveying. Working knowledge of electronic surveying instruments, and CADD system. Knowledge of legal aspects of Land Surveying as related to right of way condemnation procedures. Ability to schedule and anticipate work load to ensure that the Transportation Improvement Program is met. Skill in oral and written communication. Supervisory and management skills. Ability to interpret plans, policies, and specifications. An understanding of the organization and operation of the North Carolina Department of Transportation. Ability to comprehend and interpret deeds, R/W agreements and other legal documents. Ability to communicate with the public concerning and to explain technical engineering matters to people who do not understand such matters.

B. 1. Required Minimum Training:

Graduation from a four year college or university with a degree in Civil Engineering and a minimum of three years of progressive transportation highway engineering experience; or an equivalent combination of education and related experience.

2. Additional Training/Experience:

Additional training as needed will be supplied by supervisor and Location & Surveys Unit or NCDOT Training Personnel.

3. Equivalent Training and Experience:

Graduation from high school and eleven years of progressive transportation technician experience at the Transportation Technician III level or above or an equivalent combination of training and related experience. In lieu of a civil engineering degree (BS or AS), successful completion of the ITRE Highway Engineering Concepts Course will be required.

C. License or Certification Required by Statute or Regulation:

N.C. Driver's License is required.
Professional Engineering registration preferred

IV. CERTIFICATION: Signatures indicate agreement with all information provided, including designation of essential functions.

Supervisor's Certification: I certify that (a) I am the Immediate Supervisor of this position, that (b) I have provided a complete and accurate description of responsibilities and duties and (c) I have verified (and reconciled as needed) its accuracy and completeness with the employee.

Signature _____ Title: _____ Date: _____

Employee's Certification: I certify that I have reviewed this position description and that it is a complete and accurate description of my responsibilities and duties.

Signature _____ Title: _____ Date: _____

Section or Division Manager's Certification: I certify that this position description, completed by the above named immediate supervisor, is complete and accurate.

Signature _____ Title: _____ Date: _____

Department Head or Authorized Representative's Certification: I certify that this is an authorized, official position description of the subject position.

Signature _____ Title: _____ Date: _____